

IN THE CLAIMS:

1. (currently amended) A probe vibrating assembly for endoscopic procedures comprising a main body, a spindle in said main body, a drive mechanism for rotating said spindle, a drive member eccentrically mounted to said spindle, a clamp mechanism, said eccentrically mounted drive member being secured to said clamp mechanism for moving said clamp mechanism back and forth in accordance with the movement of said eccentric drive member, a cylinder clamped in said clamp mechanism, said clamp mechanism thereby causing said cylinder to move back and forth in response to the movement of said clamp mechanism, a probe extending through said cylinder with said cylinder being transversely between said clamp mechanism and said probe, and said probe being mounted for joint back and forth movement with said cylinder in response to the back and forth movement of said cylinder, a medical scope, said probe mounted to said medical scope, and said probe extending outwardly beyond said medical scope.

2. (canceled)

3. (currently amended) The assembly of claim [[2]] 1 including a catheter mounted to said medical scope and extending through said medical scope, and said probe being a guide wire ~~being~~ disposed in said catheter.

4. (currently amended) The assembly of claim 1 wherein said probe is a flexible needle terminating in a knife edge for

breaking up a tumor tissue to facilitate the tissue being removed, and said medical scope being a flexible endoscope.

5. (previously presented) The assembly of claim 4 including a plunger telescopically mounted in said cylinder for relative motion between said cylinder and said plunger, and said needle extending through said cylinder and said plunger.

6. (original) The assembly of claim 5 wherein said plunger and cylinder comprise part of an aspiration structure for retrieving tissue contacted by said needle.

7. (previously presented) The assembly of claim 6 wherein said aspiration structure further includes a pull handle mounted to the outer end of said needle outwardly of said cylinder whereby the outward pulling of said pull handle creates a suction to permit broken up tissue to be removed.

8. (previously presented) The assembly of claim 4 wherein said spindle is driven by a variable speed control.

9-10. (canceled)

11. (previously presented) The assembly of claim 4 wherein said spindle is rotatable about its longitudinal axis, said drive member being part of an oscillating head, said eccentrically mounted drive member moving in an eccentric path with the longitudinal axis of said drive member being spaced from said longitudinal axis of said spindle, and said drive member being mounted in an elongated slot in a slide plate in said oscillating

head to move said slide plate in a back and forth direction perpendicular to said longitudinal axis of said spindle.

12. (previously presented) The assembly of claim 4 wherein said clamp mechanism includes a clamp housing, said clamp housing having a seat for receiving said cylinder, a pivotally mounted lever located at said clamp housing, and said pivotally mounted lever having a clamping end biased in a direction toward said seat of said clamp housing whereby said cylinder may be clamped between said seat and said clamping end.

13. (previously presented) The assembly of claim 4 wherein said medical scope is detachably mounted to said main body.

14. (previously presented) The assembly of claim 1 wherein said back and forth movement is in a direction perpendicular to the longitudinal axis of said spindle.

15. (previously presented) The assembly of claim 4 wherein a pull handle is mounted to the outer end of said needle outwardly of said cylinder.

16. (previously presented) The assembly of claim 15 wherein said clamp mechanism includes a clamp housing, said clamp housing having a seat for receiving said cylinder, a pivotally mounted lever located at said clamp housing and said pivotally mounted lever having a clamping end biased in a direction toward said seat of said clamp housing whereby said cylinder may be clamped between said seat and said clamping end, said clamping end of

said lever having an arcuate recess, and said seat having an arcuate recess for receiving said cylinder.

17. (previously presented) A probe vibrating assembly for endoscopic procedures comprising a main body, a spindle in said main body, a drive mechanism for rotating said spindle, a drive member eccentrically mounted to said spindle, a clamp mechanism, said eccentrically mounted drive member being secured to said clamp mechanism for moving said clamp mechanism back and forth in accordance with the movement of said eccentric drive member, a cylinder clamped in said clamp mechanism, said clamp mechanism thereby causing said cylinder to move back and forth in response to the movement of said clamp mechanism, a probe extending through said cylinder and mounted for joint back and forth movement with said cylinder, a medical scope, said probe mounted to said medical scope, said probe extending outwardly beyond said medical scope, a plunger telescopically mounted in said cylinder for relative motion between said cylinder and said plunger, said needle extending through said cylinder and said plunger, a clamping assembly spaced from said clamp mechanism, said plunger being clamped in said clamp assembly, said clamp assembly being fixedly mounted against longitudinal movement to maintain said plunger in a fixed position, and said clamp mechanism being mounted for reciprocal longitudinal movement to move said cylinder back and forth.

18. (previously presented) The assembly of claim 1 wherein said spindle is rotatable about its longitudinal axis, said drive member being part of an oscillating head, said eccentrically mounted drive member moving in an eccentric path with the longitudinal axis of said drive member being spaced from said longitudinal axis of said spindle, and said drive member being mounted in an elongated slot in a slide plate in said oscillating head to move said slide plate in a back and forth direction perpendicular to said longitudinal axis of said spindle.

19. (previously presented) A probe vibrating assembly for endoscopic procedures comprising a main body, a spindle in said main body, a drive mechanism for rotating said spindle, a drive member eccentrically mounted to said spindle, a clamp mechanism, said eccentrically mounted drive member being secured to said clamp mechanism for moving said clamp mechanism back and forth in accordance with the movement of said eccentric drive member, a cylinder clamped in said clamp mechanism, said clamp mechanism thereby causing said cylinder to move back and forth in response to the movement of said clamp mechanism, a probe extending through said cylinder and mounted for joint back and forth movement with said cylinder, a medical scope, said clamp mechanism including a clamp housing, said clamp housing having a seat for receiving said cylinder, a pivotally mounted lever located at said clamp housing, and said pivotally mounted lever

having a clamping end biased in a direction toward said seat of said clamp housing whereby said cylinder may be clamped between said seat and said clamping end.

20. (previously presented) The assembly of claim 19 wherein a movable clamping member is located in a passageway in said clamp housing in line with said seat, a notch located in said clamp housing adjacent said seat, said notch having an arcuate shape corresponding to the shape of said cylinder, said movable clamping member being in the path of movement of said clamping end of said lever whereby said clamping end of said lever pushes said movable clamping member into clamping engagement with said cylinder, and whereby said lever may be moved in an opposite direction from its closing direction to release said movable clamping member from clamping arrangement with said cylinder.

21. (new) In an endoscopic method comprising providing a flexible probe mounted to a rotatable spindle, disposing the probe through a flexible medical scope with the probe extending longitudinally outwardly of the medical scope, inserting the probe and the medical scope into a patient, rotating the spindle, converting the rotation of the spindle into a back and forth longitudinal reciprocal movement of the probe without rotation of the probe, and using the longitudinal reciprocal movement of the probe to guide the medical scope in its passage into a patient until the medical scope reaches a hard to reach location of the

patient which requires the medical scope for the viewing that location of the patient.

22. (new) The method of claim 21 wherein the hard to reach location is selected from the group consisting of the bile duct and the pancreatic duct.

23. (new) The method of claim 21 wherein the method is selected from the group consisting of ERCP, and the breaking and removal of cancer cells.